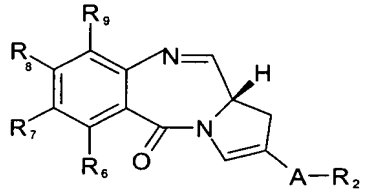
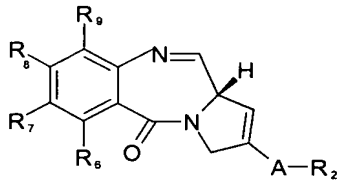
Amendments to the Claims

This listing of claims replaces all prior versions of claims pending in this application.

1. (Previously presented.) A pyrrolobenzodiazepine compound of the formula **Ia** or **Ib**:



(Ia)



(Ib)

wherein:

A is CH_2, or a single bond;

R_2 is selected from: R, OH, OR, CO_2H, CO_2R, COH, COR, SO_2R, CN, CH_2OR or $CH{=}CR^AR^B$, where R^A and R^B are independently selected from H, R^C, COR^C, $CONH_2$ $CONHR^C$, $CONR^C{}_2$, cyano or phosphonate, where R^C is an unsubstituted alkyl group having 1 to 4 carbon atoms;

R_6, R_7 and R_9 are independently selected from H, R, OH, OR, halo, amino, NHR, nitro, Me_3Sn;

where R is a lower alkyl group having 1 to 10 carbon atoms, or an aralkyl group of up to 12 carbon atoms, whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or one or more carbonyl groups or one or more ether or thioether groups, or an aryl group of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups;

and R_8 is selected from H, R, OH, OR, halo, amino, NHR, nitro, Me_3Sn, where R is as defined above or where the compound is a dimer with each monomer being the same or different and being of formula **Ia** or **Ib**, where the R_8 groups of the monomers form together a bridge having the formula -X-R^1-X- linking the monomers, where R^1 is an alkylene chain containing from 3 to 12 carbon atoms, which chain may be interrupted by one or more

hetero-atoms and/or aromatic rings and may contain one or more carbon-carbon double or triple bonds, and each X is independently selected from O, S, or N; or R_7 and R_8 together form a group -O-$(CH_2)_p$-O-, where p is 1 or 2; with the proviso that when A is a single bond, then R_2 is not $CH{=}CR^AR^B$, where R^A and R^B are independently selected from H, R^C, COR^C, $CONH_2$, $CONHR^C$, $CONR^C{}_2$, cyano or phosphonate, where R^C is an unsubstituted alkyl group having 1 to 4 carbon atoms.

2. Canceled.

3. (Previously presented.) A compound according to claim 1, wherein A is CH_2.

4. (Original.) A compound according to claim 3, wherein R_2 is CO_2H, CO_2R, CH_2OH, or CH_2OR.

5. (Original.) A compound according to claim 4, wherein R_2 is CO_2Me, $CO_2{}^tBu$, CH_2OH, or CH_2OAc.

6. (Previously presented.) A compound according to claim 1, wherein A is a single bond, and R_2 is an aryl group, or an alkyl or alkaryl group which contains at least one double bond which forms part of a conjugated system with a double bond of the pyrrolobenzodiazepine compound C-ring.

7. (Previously presented.) A compound according to claim 1 wherein R_6, R_7 and R_9 and, unless the compound is a dimer, R_8 are independently selected from H and OR.

8. (Original.) A compound according to claim 7, wherein R_6, R_7 and R_9 and, unless the compound is a dimer, R_8 are independently selected from H, OMe and OCH_2Ph.

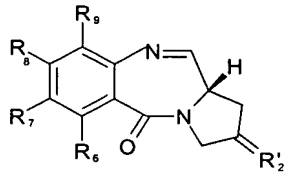
9. (Original.) A compound according to claim 7, wherein R_7 and, unless the compound is a dimer, R_8 are OR, and R_6 and R_9 are H.

10. (Original.) A compound according to claim 9, wherein R_7 and, unless the compound is a dimer, R_8 are independently either OMe or OCH_2Ph.

11. Canceled.

12. (Previously presented.) A compound according to claim 1 which is a dimer, wherein the dimer bridge is of the formula -O-$(CH_2)_q$-O-, where q is from 3 to 12.

13. (Previously presented.) A compound of formula **II**:



(II)

wherein:

R'_2 is O;

R_6, R_7 and R_9 are independently selected from H, R, OH, OR, halo, amino, NHR, nitro, Me_3Sn;

where R is a lower alkyl group having 1 to 10 carbon atoms, or an aralkyl group of up to 12 carbon atoms, whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or one or more carbonyl groups or one or more ether or thioether groups, or an aryl group of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups;

and where the compound is a dimer with each monomer being the same or different and being of formula **II**, where the R_8 groups of the monomers form together a bridge having the formula -X-R^1-X- linking the monomers, where R^1 is an alkylene chain containing from 3 to 12 carbon atoms, which chain may be interrupted by one or more hetero-atoms and/or aromatic rings and may contain one or more carbon-carbon double or triple bonds, and each X is independently selected from O, S, or N.

14. Canceled.

15. (Previously presented.) A compound according to claim 13, wherein R_6, R_7 and R_9 are independently selected from H, OR or a halogen atom.

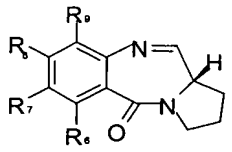
16. (Previously presented.) A compound according to claim 15, wherein R_6, R_7 and R_9 are independently selected from H, OMe, OCH_2Ph, and I.

17. (Previously presented.) A compound according to claim 15, wherein R_7 is OR or a halogen and R_6 and R_9 are H.

18. (Previously presented.) A compound according to claim 17, wherein R_7 is selected from OMe, OCH_2Ph or I.

19. (Previously presented.) A compound according to claim 13, wherein the dimer bridge is of the formula $-O-(CH_2)_q-O-$, where q is from 3 to 12.

20. (Previously presented.) A compound of the formula **III**:



(III)

wherein:

R_6, R_7 and R_9 are independently selected from H, R, OH, OR, halo, amino, NHR, nitro, Me_3Sn;

where R is a lower alkyl group having 1 to 10 carbon atoms, or an aralkyl group of up to 12 carbon atoms, whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or one or more carbonyl groups, or one or more ether or thioether groups, or an aryl group of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups;

and R_8 is amino.

21. (Currently amended.) A compound according to claim 20, wherein only one of R_6, R_7~~, R_8~~ and R_9 is H.

22. to 24. Canceled.

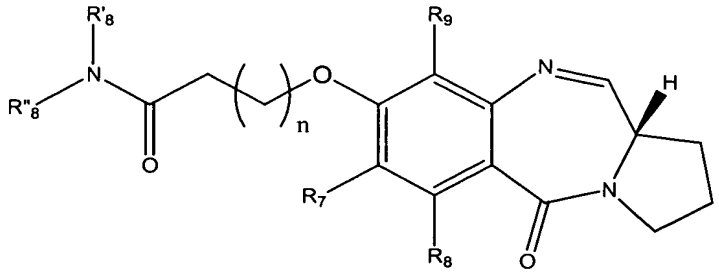
25. (Currently amended.) A compound according to claim 20, wherein at least one of R_6, R_7, ~~R_8~~ and R_9 is an aryl group of up to 12 carbon atoms, which is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains ~~one or more hetero atoms which may from part of, or be, a functional group~~ one or more carbonyl groups, or one or more ether or thioether groups.

26. (Currently amended.) A compound according to claim 25, wherein at least one of R_6, R_7, ~~R_8~~ and R_9, is a phenyl group, optionally substituted by one or more methoxy, ethoxy or nitro groups.

27. (Currently amended.) A compound according to claim 26, wherein at least one of R_6, R_7, ~~R_8~~ and R_9, is selected from: Ph, p-MeO-Ph, m-NO_2-Ph and p-NO_2-Ph.

28. Canceled.

29. (Previously presented.) A compound of formula **IV**:



(IV)

wherein:

R_6, R_7 and R_9 are independently selected from H, R, OH, OR, halo, amino, NHR, nitro, Me_3Sn;

where R is a lower alkyl group having 1 to 10 carbon atoms, or an aralkyl group of up to 12 carbon atoms, whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or one or more carbonyl groups, or one or more ether or thioether groups, or an aryl group of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups;

R_8' and R_8'' are either independently selected from H, R or together form a cyclic amine; and

n is from 1 to 7.

30. Canceled.

31. Canceled.

32. (Previously presented.) A compound according to claim 29, wherein R_6 and R_9 are selected from H and OR.

33. (Original.) A compound according to claim 32, wherein R6 and R9 are selected from OMe, OEt and OBn.

34. (Currently amended.) A compound according to claim ~~30~~ 32, wherein n is 1 to 3.

35. (Previously presented.) A compound according to claim 1, claim 13, claim 20 or claim 29 wherein R is selected from a lower alkyl group having 1 to 10 carbon atoms, or an aralkyl group of up to 12 carbon atoms, or an aryl group of up to 12 carbon atoms, optionally substituted by one or more halo, hydroxy, amino, or nitro groups.

36. (Original.) A compound according to claim 35, wherein R is selected from a lower alkyl group having 1 to 10 carbon atoms optionally substituted by one or more halo, hydroxy, amino, or nitro groups.

37. (Original.) A compound according to claim 36, wherein R is an unsubstituted straight or branched chain alkyl having 1 to 10 carbon atoms.

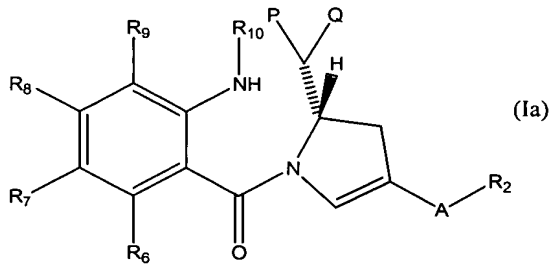
38. (Currently amended.) A method of treating cancer comprising administering an effective amount of a compound according to claim 1~~, claim 13, claim 20~~ or claim 50 to a patient in need of such treatment wherein the cancer is selected from lung cancer, colon cancer, CNS cancer, melanoma, renal cancer, breast cancer and ovarian cancer.

39. Canceled.

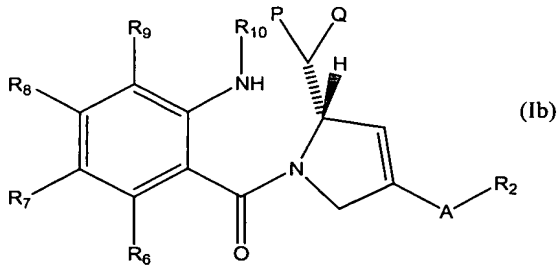
40. (Previously presented.) A method of treating cancer comprising administering an effective amount of a compound according to claim 29 to a patient in need of such treatment wherein the cancer is selected from lung cancer, colon cancer, CNS cancer, melanoma, renal cancer and ovarian cancer.

41. Canceled.

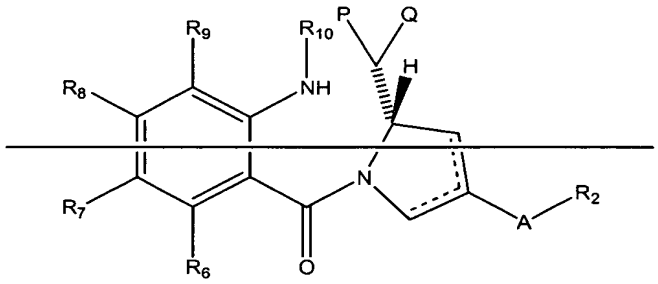
42. (Currently amended.) A process for preparing a compound according to claim 1 comprising cyclizing a compound of formula Ia or Ib



(Ia)

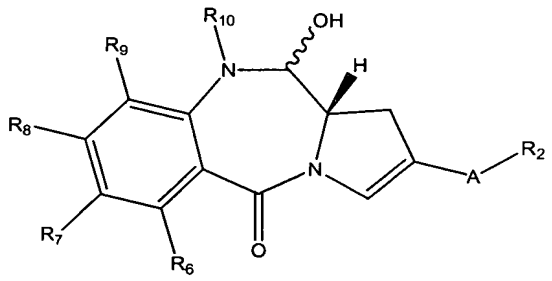


(Ib)

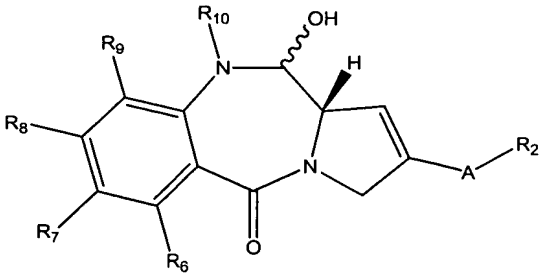


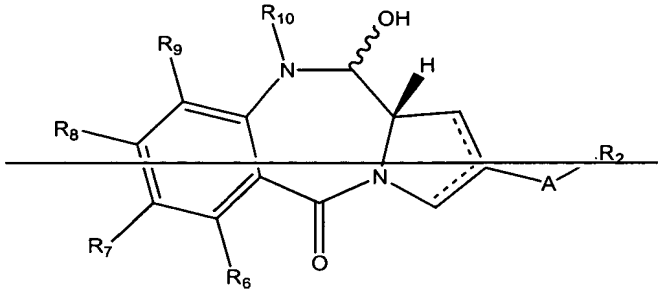
wherein A, R_2, R_6, R_7, R_8 and R_9 are as defined in claim 1, R_{10} is a nitrogen protecting group and CPQ is a masked aldehyde;

to a compound of formula



or





wherein A, R_2, R_6, R_7, R_8, R_9 and R_{10} are as defined above and converting the above compound to a compound according to claim 1.

43. to 45. Canceled.

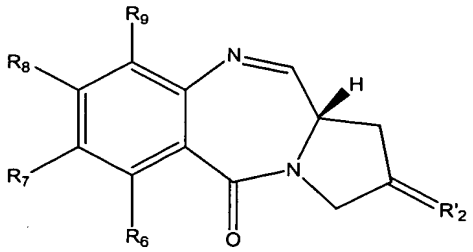
46. (Previously presented.) A composition comprising a compound according to claim 1 and a pharmaceutically acceptable carrier or diluent.

47. (Previously presented.) A composition comprising a compound according to claim 13 and a pharmaceutically acceptable carrier or diluent.

48. (Previously presented.) A composition comprising a compound according to claim 20 and a pharmaceutically acceptable carrier or diluent.

49. (Previously presented.) A composition comprising a compound according to claim 29 and a pharmaceutically acceptable carrier or diluent.

50. (Currently amended.) A compound of formula **II**:



wherein:

R'_2 is CH_2;

R_6, R_7 and R_9 are independently selected from H, R, OH, OR, halo, amino, NHR, nitro, Me_3Sn;

where R is lower alkyl group having 1 to 10 carbon atoms, or an aralkyl group of up to 12 carbon atoms, whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or an aryl group of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally containing ~~one or more hetero atoms which may from part of, or be, a functional group~~ one or more carbonyl groups or one or more ether or thioether groups;

and R_8 is selected from H, R, OH, OR, halo, amino, NHR, nitro, Me_3Sn, where R is as defined above or the compound is a dimer with each monomer being the same or different and being of formula **II**, where the R_8 groups of the monomers form together a bridge having the formula $-X-R^1-X-$ linking the monomers, where R^1 is an alkylene chain containing from 3 to 12 carbon atoms, which chain may be interrupted by one or more hetero-atoms and/or aromatic rings and may contain one or more carbon-carbon double or triple bonds, and each X is independently selected from O, S, or N; or R_7 and R_8 together form group $-O-(CH_2)_p-O-$, where p is 1 or 2.

51. (Previously presented.) A compound according to claim 50, wherein R_6, R_7 and R_9 and, unless the compound is a dimer, R_8 are independently selected from H, OR or a halogen atom.

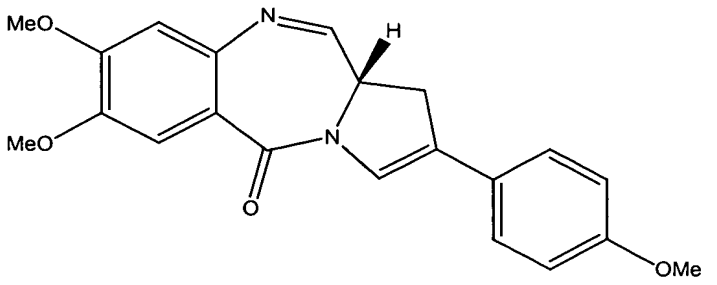
52. (Previously presented.) A compound according to claim 51, wherein R_6, R_7 and R_9 and, unless the compound is a dimer, R_8 are independently selected from H, OMe, OCH_2Ph, and I.

53. (Previously presented.) A compound according to claim 51, wherein R_7 and, unless the compound is a dimer, R_8 are independently OR or a halogen atom and R_6 and R_9 are H.

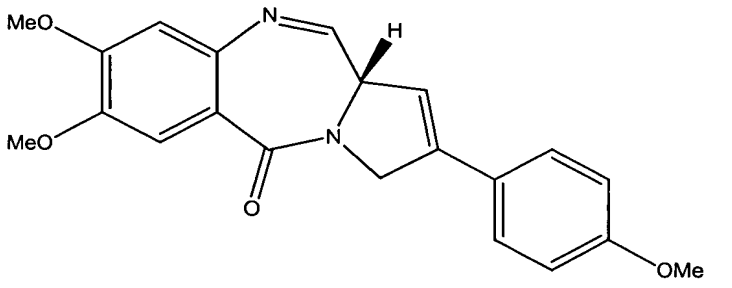
54. (Previously presented.) A compound according to claim 53, wherein R_7 and, unless the compound is a dimer, R_8 are independently selected from OMe, OCH_2Ph or I.

55. (Previously presented.) A compound according to claim 50 which is a dimer, wherein the dimer bridge is of the formula $-O-(CH_2)_q-O-$, where q is from 3 to 12.

56. (Currently amended.) A compound ~~according to claim 1 wherein~~ selected from the group consisting of:



and



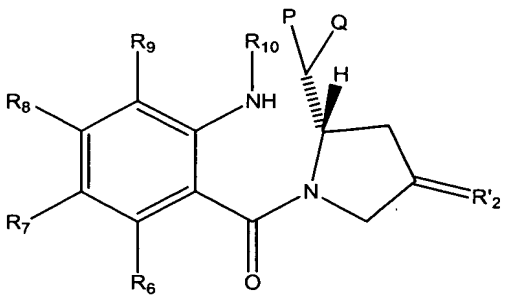
~~A is a single bond;~~

~~R_2 is 4-methoxyphenyl;~~

~~R_6 and R_9 are H, and~~

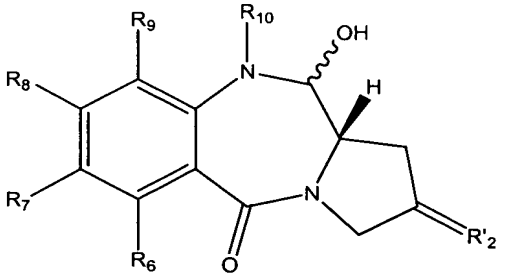
~~R_7 and R_8 are methoxy~~.

57. (Previously presented.) A process for preparing a compound according to claim 13 comprising cyclizing a compound of formula



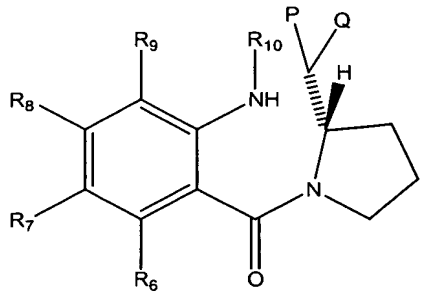
wherein R'_2, R_6, R_7, R_8 and R_9 are as defined in claim 13, R_{10} is a nitrogen protecting group and CPQ is a masked aldehyde;

to a compound of formula



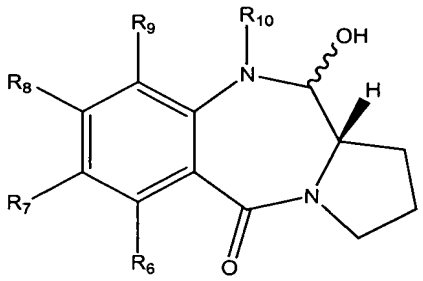
wherein R'_2, R_6, R_7, R_8, R_9 and R_{10} are as defined above, and converting the above compound to a compound according to claim 13.

58. (Previously presented.) A process for preparing a compound according to claim 20 comprising cyclizing a compound of formula



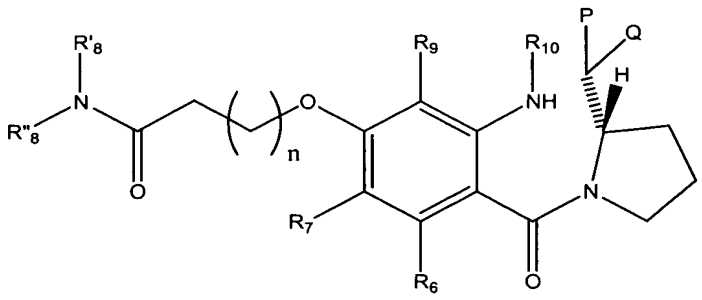
wherein R_6, R_7, R_8, and R_9 are as defined in claim 20, R_{10} is a nitrogen protecting group and CPQ is a masked aldehyde;

to a compound of formula



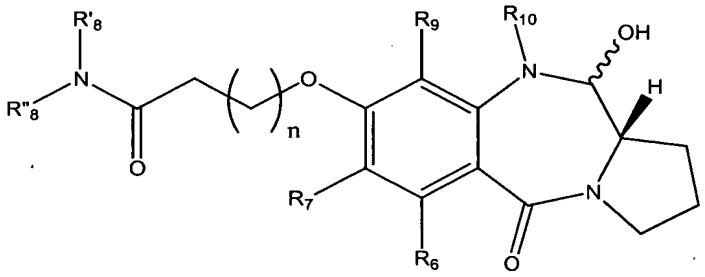
wherein R_6, R_7, R_8, R_9 and R_{10} are as defined above, and converting the above compound to a compound according to claim 20.

59. (Previously presented.) A process for preparing a compound according to claim 29 comprising cyclizing a compound of formula



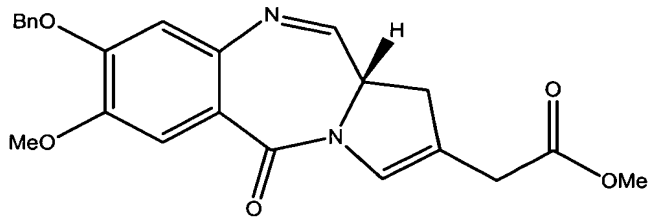
wherein R_6, R_7, R_8', R_8'', and R_9 are as defined in claim 29, R_{10} is a nitrogen protecting group and CPQ is a masked aldehyde;

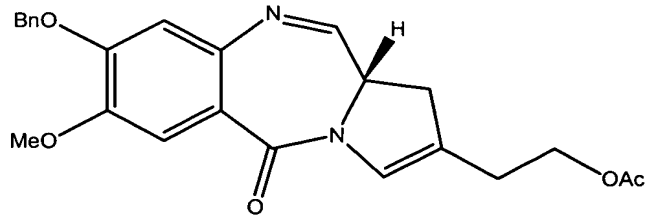
to a compound of formula

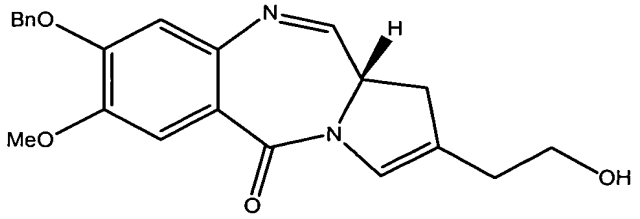


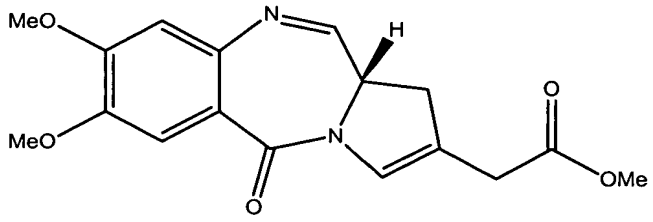
wherein R_6, R_7, R_8', R_8'', R_9 and R_{10} are as defined above, and converting the above compound to a compound according to claim 29.

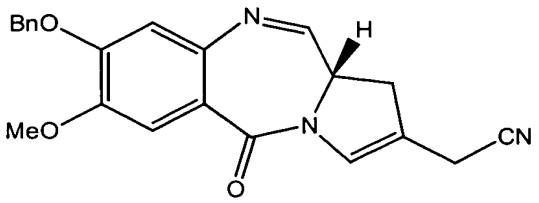
60. (Currently amended.) A ~~The~~ method ~~of claim 38~~ of treating cancer comprising administering an effective amount of a compound wherein the compound is selected from the group consisting of

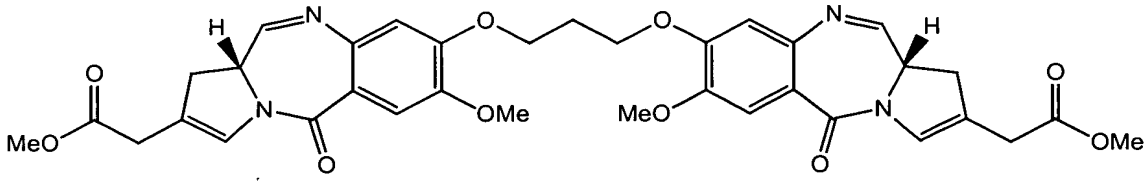


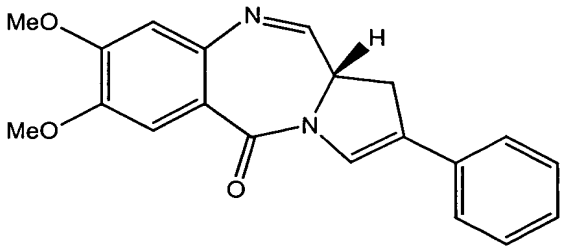




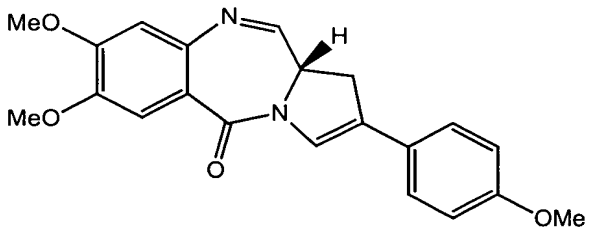








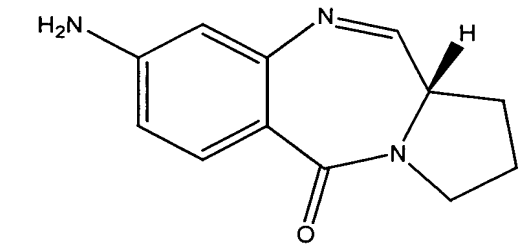
and

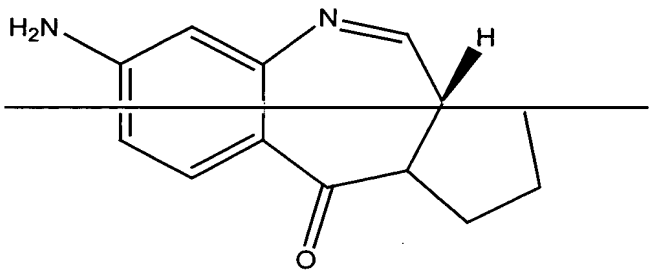


to a patient in need of such treatment and wherein the cancer is selected from lung cancer, colon cancer, CNS cancer, melanoma, renal cancer, breast cancer and ovarian cancer.

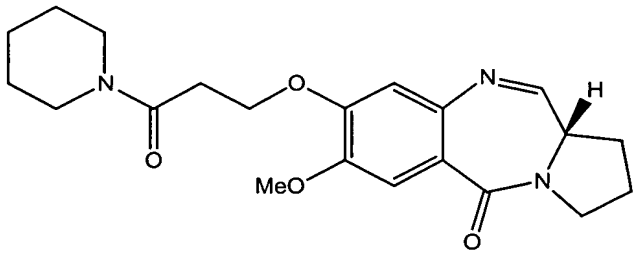
61. Canceled.

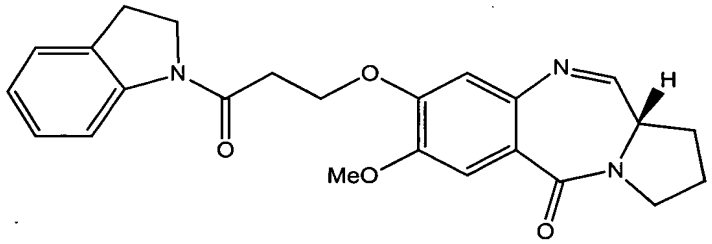
62. (Currently amended.) The method of claim 38 wherein the compound is

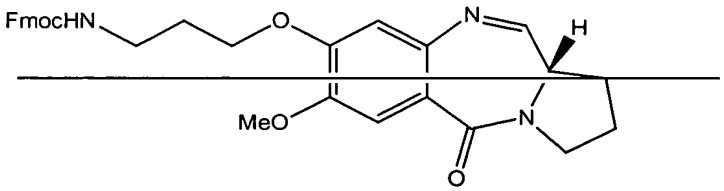


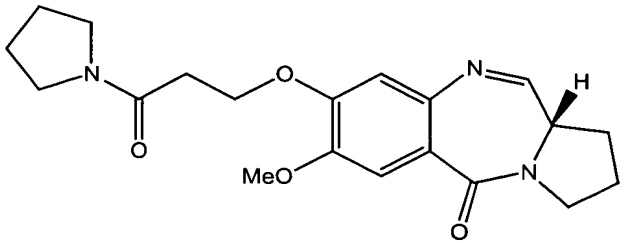


63. (Currently amended.) The method of claim 40 wherein the compound is selected from the group consisting of

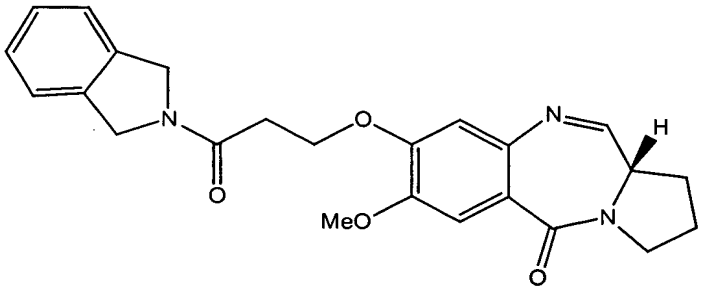




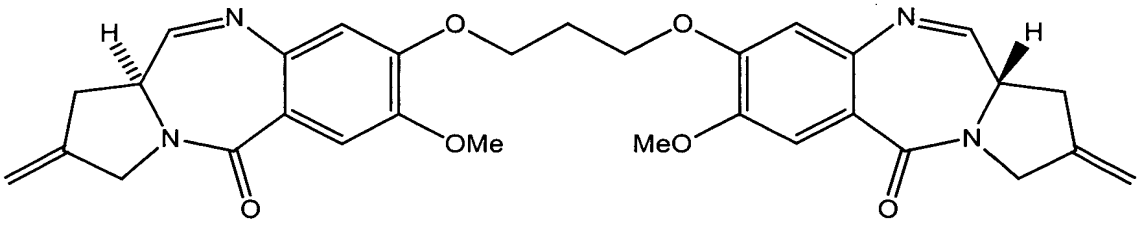




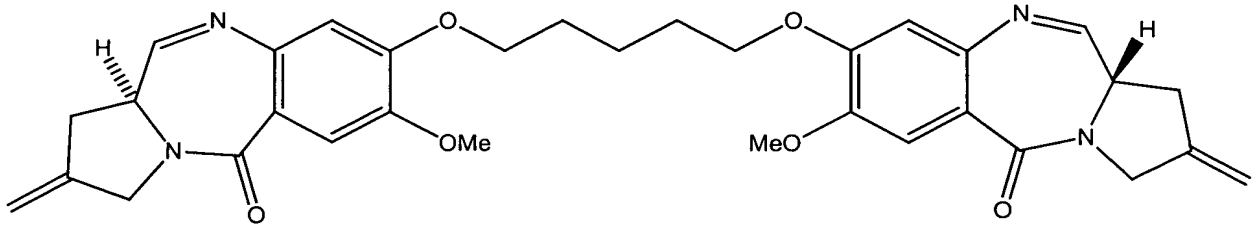
and

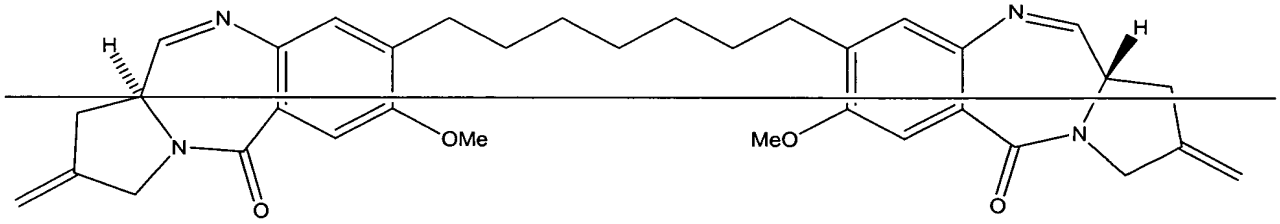


64. (Currently amended.) The method of claim 38 wherein the compound is selected from the group consisting of



and





65. (New.) A method of treating cancer comprising administering an effective amount of a compound according to claim 20 to a patient in need of such a treatment wherein the cancer is selected from lung cancer, colon cancer, CNS cancer, melanoma, renal cancer and breast cancer.